

# Can we "Cancel" it?

**HW**

Name \_\_\_\_\_

Factor?  $\Rightarrow$  Changes structure  $\rightarrow$  product  
Cancel across addition?  $\rightarrow$  NO

$$1) \frac{(x+3)x}{(x+3)+x} \quad \text{NO}$$

$$\frac{x^2+2}{x^2} \quad \text{NO}$$

$$2) \frac{(x+3)+x}{(x+3)x} \quad \text{NO}$$

yes!  $9) \frac{x^2+2x}{x^2} \cdot \frac{x(x+2)}{x \cdot x} = \frac{x+2}{x}$

yes!  $11) \frac{(x+3)+(x+3)x}{(x+3)x} = \frac{(1+x)(x+3)}{(x+3)x} = \frac{1+x}{x} = \frac{x+1}{x}$

$$10) \frac{x^2(3+2x)}{3+x^2} \quad \text{NO}$$

$$1) \frac{(x+3)x}{(x+3)+x} \cdot \frac{2x}{(x+3)} = \frac{2x^2}{(x+3)+x}$$

yes!  $\frac{2+3x}{2+3x} = 1$

yes!  $12) \frac{4x^2}{12+16x^2} = \frac{4x^2}{4(3+4x^2)}$

$$3) \frac{x}{(x+3)+x} \cdot \frac{2x}{(x+3)} \quad \text{NO}$$

$$13) \frac{(x+3)(x-2)}{(x-3)(x+2)} \quad \text{NO}$$

$$4) \frac{x}{x-4} + \frac{x-4}{(x+3)} \quad \text{NO}$$

$$14) \frac{x^2+3x+1}{3} \quad \text{NO}$$

yes for part  
 $7) \frac{x-4}{x(x+3)} \quad \text{NO}$

$$15) \frac{4x}{3+4x-x^2} \quad \text{NO}$$

$$16) \frac{x^2 \cdot \cancel{(3+2x)}}{\cancel{(3+2x)}} = x^2$$

yes

$$7) \frac{(x-4)}{4} + \frac{x^2}{3+x^2} \text{ NO}$$

$$8) \frac{x^2 + 2x + 3}{x^2 + 2x + 2} \text{ NO}$$